



Department of Commerce

Safety & Buildings Division

201 West Washington Avenue

P.O. Box 2658

Madison, WI 53701-2658

Evaluation #

200319-H

Wisconsin Alternate Standard Evaluation

Standard

2003 International Mechanical Code
Section 507.1 and 507.2

SCOPE OF EVALUATION

Sections 507.1 and 507.2 of the 2003 International Mechanical Code, IMC, regarding exhaust system requirements where commercial cooking appliances and dishwashing appliances produce grease, smoke, heat or steam have been evaluated for compliance with certain requirements of the **Wisconsin Commercial Building Code (WCBC), Chapters Comm 61-65**. Pursuant to s. Comm 61.61 the alternate standard and methodology as described below is approved for use in the State of Wisconsin to satisfy the intent and the provisions of IMC 507.1 and 507.2 as adopted by the Wisconsin Commercial Building Code.

This evaluation does not include the review for compliance to provisions of the current Wisconsin Commercial Building Code other than those specifically referenced above.

The use of this alternate standard is subject to the description, limitations and conditions described in this evaluation.

DESCRIPTION AND USE

The current Wisconsin Commercial Building Code together with the 2000 edition of the International Mechanical Code, IMC, does not specifically address, acknowledge or prohibit the utilization of recirculating hoods and ventless steam removal systems in conjunction with commercial kitchen appliances and their operation where grease, smoke, heat or steam is produced. The revisions under the 2003 edition of the IMC clarify the use of such appliances.

Sections 507.1 and 507.2 of the 2003 International Mechanical Code read as follows:

507.1 General. Commercial kitchen exhaust hoods shall comply with the requirements of this section. Hoods shall be Type I or Type II and shall be designed to capture and confine cooking vapors and residues.

Exceptions:

1. Factory-built commercial exhaust hoods which are tested in accordance with UL 710, listed, labeled and installed in accordance with Section 304.1 shall not be required to comply with Sections 507.4, 507.5, 507.7, 507.12, 507.13, 507.15 and 507.16.
2. Factory-built commercial cooking recirculating systems which are tested in accordance with UL 197, listed, labeled and installed in accordance with Section 304.1 shall not be required to comply with Sections 507.4, 507.5, 507.7, 507.12, 507.13, 507.14 and 507.15.
3. Net exhaust volumes for hoods shall be permitted to be reduced during no-load cooking conditions, where engineered or listed multi-speed or variable-speed controls automatically operate the exhaust system to maintain capture and removal of cooking effluents as required by this section.

507.2 Where required. A Type I or Type II hood shall be installed at or above all commercial food cooking appliances in accordance with Sections 507.2.1 and 507.2.2. Where any cooking appliance under a single hood requires a Type I hood, a Type I hood shall be installed. Where a Type II hood is required a Type I or Type II shall be installed.

507.2.1 Type I hoods. Type I hoods shall be installed where cooking appliances produce grease or smoke, such as occurs with griddles, fryers, broilers, ovens, ranges and wok ranges.

507.2.2 Type II hoods. Type II hoods shall be installed where cooking or dishwashing appliances produce heat or steam and do not produce grease or smoke, such as steamers, kettles, pasta cookers and dishwashing machines.

Exceptions:

1. Under-counter-type commercial dishwashing machines.
2. A Type II hood is not required for dishwashers and potwashers that are provided with heat and water vapor exhaust systems that are supplied by the appliance manufacturer and are installed in accordance with the manufacturer's instructions.

507.2.3 Domestic cooking appliances used for commercial purposes. Domestic cooking appliances utilized for commercial purposes shall be provided with Type I or Type II hoods as required for the type of appliances and processes in accordance with Sections 507.2, 507.2.1 and 507.2.2.

507.2.4 Solid fuel. Type I hoods for use over solid fuel-burning cooking appliances shall discharge to an exhaust system that is independent of other exhaust systems.

LIMITATIONS/CONDITIONS

The evaluation number assigned to this alternate standard is to accompany each plan submittal for projects that utilizes this alternate standard.

Deviations from this alternate standard shall void the use of the approval.

Pursuant to s. Comm 61.61(7), the department may reexamine an approval and issue a revised approval at any time.

This approval will be valid through July 17, 2008, unless modifications are made to the alternate standard or a re-examination is deemed necessary by the department.

DISCLAIMER

This approval addresses only the specified applications for the alternate standard and does not waive any code requirements not specified in this document.

Approval Date: July 17, 2003 By: _____

James J. Quast
Program Manager
Safety and Buildings Division